

ABSTRACT

A method for forming insulating precursors to via holes formed through conductive and semiconductive substrates includes use of stereolithographic processes. An unconsolidated material is introduced into a precursor hole, then regions of the unconsolidated material that are located adjacent to the surface of each precursor hole are selectively consolidated to form an insulative coating thereon. This process may be conducted once to form a single-layered insulative coating or multiple times to form multilayered insulative coatings. Subsequently, unconsolidated material may be removed to expose a via hole that extends through the insulative coating. Structures that include via holes and conductive vias that have been insulated in this manner are also disclosed, as are systems for forming the insulative coatings.

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